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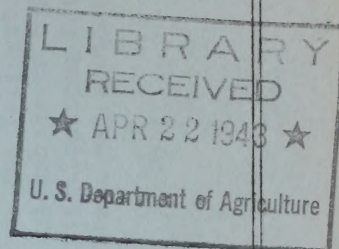
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SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for the  
MISSOURI and ARKANSAS  
DRAINAGE BASINS

April 1, 1943



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Issued by the  
United States Department of Agriculture  
Soil Conservation Service  
Division of Irrigation  
In Cooperation with  
The Colorado Agricultural Experiment Station  
Colorado State College  
Fort Collins, Colorado

April 10, 1943

LOW PRICES AND LIMITED VOLUME

1934

REVENUE AND EXPENDITURE

REVENUE

April 1, 1934

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Issued by the  
United States Department of Agriculture  
Soil Conservation Service  
Division of Investigation  
In cooperation with  
The Colorado Agricultural Experiment Station  
Colorado State College  
Fort Collins, Colorado

April 10, 1934



# SNOW SURVEYS AND IRRIGATION WATER FORECASTS FOR MISSOURI AND ARKANSAS RIVERS

April 1, 1943

The following data pertaining to snow surveys and irrigation water-supply forecasts are provided by the Division of Irrigation, Soil Conservation Service, of the U. S. Department of Agriculture, in cooperation with State departments, other Federal bureaus and local organizations. The snow measurements are made principally by field personnel of the following organizations: Forest Service, National Park Service, Bureau of Reclamation, U. S. Geological Survey, War Department and State Experiment Stations. This work is otherwise conducted cooperatively with the State Engineers of Colorado and Wyoming, and various municipalities, irrigation associations, power companies and others. Precipitation records are supplied by the U. S. Weather Bureau.

## P R E C I P I T A T I O N   D A T A

WATERSHED	STATE	Precipitation October 1 to March 31	Departure from Normal	Precipitation	Departure from Normal
		Inches	Inches	March Inches	Inches
Missouri	East. Mont.	3.70	-0.02	0.71	-0.08
Missouri	Cent. Mont.	5.29	+0.67	0.72	-0.14
Missouri	North. Wyo.	9.74	+2.66	1.23	-0.33
North Platte	Wyoming	7.33	+1.60	1.74	+0.42
South Platte	Colorado	8.87	+2.15	1.88	+0.16
Arkansas	Colorado	5.45	+0.30	1.16	-0.05

Precipitation on the watershed of the Missouri and its tributaries in Montana, the Yellowstone and North Platte in Wyoming and the Arkansas was below normal during March. On the watersheds of the North and South Platte precipitation was above normal during March. The accumulated precipitation from October 1 to March 31 is above normal on all the watersheds except the Missouri in eastern Montana and northern Wyoming.







## SUMMARY OF APRIL 1 SNOW SURVEYS AND COMPARISON OF DATA WITH THOSE OF PREVIOUS

## YEARS BY WATERSHEDS

WATERSHEDS	Snow Depth		Water Content		Number courses in average	Snow Density		1943 Water Content in Percent of	
	Eight Year Avg.*	1942	1943	Eight year Avg.*		1942	1943	Eight year Avg.*	1942
	In.	In.	In.	In.		Percent	Percent	Percent	Percent
MISSOURI RIVER									
Jefferson River	31.0	32.4	10.0	10.2	6	32	32	154	151
Madison River	53.3	45.0	18.8	14.1	8	35	31	158	211
Gallatin River	31.5	36.5	9.7	10.9	7	31	30	113	101
Missouri River**	27.9	31.4	8.1	9.0	11	29	29	136	122
Marias River	37.8	31.0	13.2	9.2	2	35	30	155	223
Yellowstone River	30.2	27.2	8.7	6.9	10	29	25	178	225
Milk River	17.3	20.3	6.1	6.0	1	35	30	102	103
Shoshone River	48.8	41.7	14.3	9.8	3	29	23	200	292
Bighorn River	35.9	30.5	10.4	7.4	13	29	24	178	250
Tongue River	13.9	18.4	3.2	4.1	1	23	22	50	39
Powder River	25.7	29.6	5.8	6.9	2	23	23	162	136
North Platte River	54.7	52.1	18.6	16.3	11	34	31	107	122
Sweetwater River	39.6	35.6	11.0	8.8	2	28	25	181	226
Laramie River	37.5	35.1	11.7	10.0	9	31	28	128	150
South Platte River***	22.4	28.2	6.0	7.6	3	27	27	145	114
Crow Creek	12.8	19.4	3.9	5.2	1	30	27	28	21
Poudre River	38.3	35.9	12.0	10.0	7	31	28	125	150
Big Thompson River	51.8	48.8	16.0	13.8	2	31	28	122	142
St. Vrain River	45.4	43.5	13.7	12.4	1	30	29	147	163
Boulder Creek	33.4	30.1	11.2	10.0	2	34	33	128	143
Clear Creek	46.1	47.5	13.5	13.9	1	29	29	133	129
ARKANSAS RIVER	35.5	36.5	10.5	10.2	10	30	28	102	105

\*Some for shorter periods.

\*\*Headwaters of Missouri River

\*\*\*Above Denver, Colorado.







## WATER SUPPLY OUTLOOK

### MONTANA

MISSOURI RIVER AND TRIBUTARIES. Snow cover on the headwaters of these streams is much greater this year than formerly and above normal run-off is to be expected with sustained flows well into late summer. The water content of the snow on the Jefferson and Madison drainages is high at this time, especially the latter. At Lewis Lake Divide, on the Madison drainage, the snow now holds nearly 63 inches of water as compared with about 29 a year ago. For the headwaters of the Missouri the present water content is 25 percent above that of a year ago. The Marias and Yellowstone rivers are expected to be at high stage during the peak melting period and because of the heavy cover of snow on these drainages these streams will maintain a heavy flow throughout the summer months. Reservoir storage throughout the Missouri drainage area in Montana is for the most part well up to capacity. However, Flathead Lake, largest reservoir in this section of the state, now stores less than 10 percent of its capacity. The anticipated heavy run-off in practically all the tributaries of the Missouri will provide additional stored water for late irrigation.

### WYOMING

SHOSHONE RIVER. On the headwaters of this stream water held in snow storage is much greater than last year. Just within the Yellowstone Park boundary, at Sylvan Pass, the water content is 25 inches or four times that of a year ago. Run-off will be much in excess of last year and the Shoshone Reservoir will fill to capacity. Present outlook for ample irrigation water supply this season along the Shoshone valley is especially good.

BIGHORN RIVER. The present snow cover on the headwaters of this stream and its tributaries indicates a much-above normal run-off this season. The water content of the snow is now about 50 percent greater than it was a year ago. At Togwotee Pass the recent snow survey showed the water content to be 43 inches as compared with 21 last year at this time. The snow on this mountain pass averages more than 8 feet in depth. The low snow is now melting and the river flow is much above normal for this time of year. At Thermopolis the March precipitation was above normal, soil moisture excellent and range and crop conditions good. Reservoir storage in the Bighorn basin is now normal and because of the expected heavy run-off during the melting period all reservoirs will be filled to capacity.

POWDER AND TONGUE RIVERS. The headwaters of the Powder are now covered with  $1\frac{1}{3}$  more snow than last year at this time. Run-off is expected to be normal or better. Snow on the Tongue drainage is less than one-half the amount a year ago. Throughout the irrigated area along the Tongue valley the soil moisture is good to excellent with range and crop conditions good at this time. Reservoir storage is well above normal.

NORTH PLATTE RIVER. The outlook for the coming season's irrigation water supply is now exceptionally good. The water content of the snow on Rabbit Ears Pass is nearly 30 inches, at Old Battle 35, and on the west slope of the Snowy Range about 40. Low snow is now melting and the river is high. The probable April-July 1943 run-off at Saratoga will be 500,000 acre-feet or more. The March precipitation throughout the irrigated areas







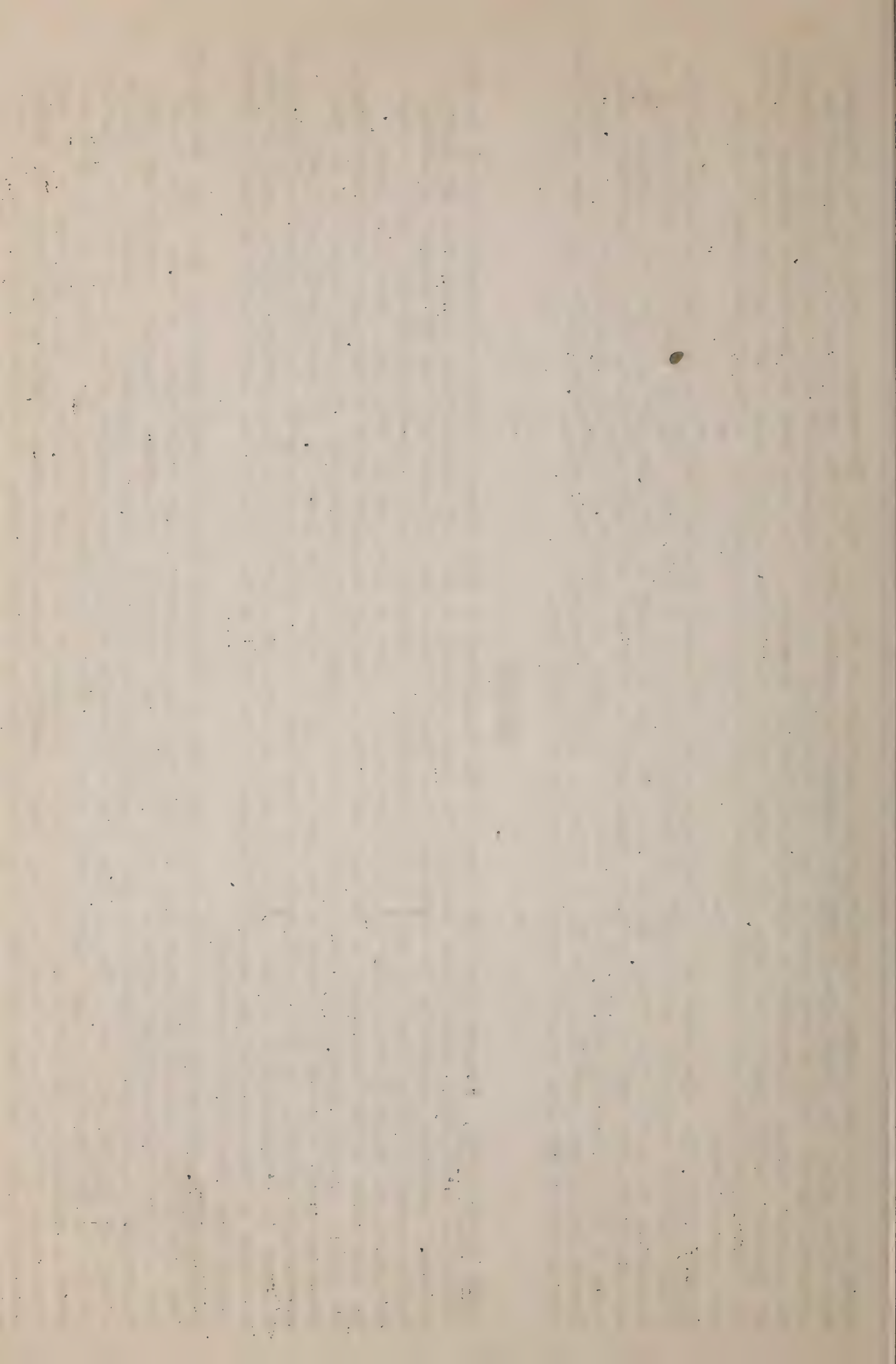
along this valley was normal or better and soil moisture now fair to good. The present storage in the principal reservoirs along the river exceeds 600,000 acre-feet as compared with about 400,000 a year ago. Because of the potential run-off held in deep snows at the high elevations over the headwaters of this stream and its tributaries the maximum storage is expected to approximate 1,500,000 acre-feet. The snow over the Sweetwater drainage is about 125 percent greater than a year ago. The coming run-off will be much greater than it was last year and well above the normal flow. The water content of the snow pack is nearly 20 inches which is the greatest amount over the past several years.

LARAMIE RIVER. The snow cover on this drainage is now 50 percent greater than a year ago and the outlook for the coming season's irrigation water supply is therefore very good at this time. The low snow is now melting which is increasing the flow of the river. At the State line the discharge is more than the past five year average. The expected April-July 1943 run-off of the Laramie River at Jelm will be 70,000 acre-feet. The soil moisture conditions of the irrigated areas are good to excellent and range and crops fair to good. Reservoir filling has continued during March with Wheatland No. 2 filled to 50,000 acre-feet. There will be available additional water for storage during the peak run-off period in late May and early June.

#### COLORADO

SOUTH PLATTE RIVER. Present snow conditions on the headwaters of this stream indicate a favorable outlook for the irrigation water supply this coming season. The water storage in the snow exceeds that of last year by about 15 percent. Reservoir storage in the upper and lower South Platte areas is practically at 100 percent capacity. Surplus water will flow down the river and its tributaries during the early summer peak run-off. Soil moisture throughout the South Platte valley and tributary areas is good to excellent at this time. For Clear Creek the snow cover on the headwaters is one-half more than a year ago and about equal to the past eight-year average. The coming run-off, April-July, 1943 at Golden, should exceed 200,000 acre-feet. The water content on the St. Vrain watershed is about 60 percent above last year and the run-off at Lyons for the April-July period will approximate 100,000. On the Big Thompson the snow cover is also above last year by about 40 percent and the run-off at Drake is estimated to be 85,000. On the Poudre watershed the water in the snow averaged about a half more than last year at this time and the expected discharge of the river at the mouth of the canon for the April-July period will be more than 225,000 acre-feet.

ARKANSAS RIVER. The water supply outlook for this coming irrigation season is very favorable. Although the run-off from snow is not expected to exceed that of last year full assurance in the water supply is taken in the fact that all principal reservoirs are now filled. In 1942 the storage in the Arkansas drainage, mountain and plain reservoirs, was the best in several years. However, at this time the storage aggregates 50 percent over 1942 or a total of 388,000 acre-feet. The new John Martin Reservoir on the river near Las Animas holds 50,000 acre-feet for use in the lower valley and certain areas along the river in western Kansas. The discharge of the Arkansas River at Salida for the period April-July, 1943 is estimated to be 300,000 acre-feet. Soil moisture in the irrigated areas of the valley is fair to good. March precipitation was below normal. Snow on the Purgatoire River watershed is the least recorded over the past seven years as of April first. In the lower part of the valley, Trinidad area, March precipitation was below normal. However, the soil moisture is fair to good. Spring crops are coming nicely. Model Reservoir is filled to near capacity.





## MISSOURI AND ARKANSAS RIVER WATERSHEDS

## Summary of Federal and State Cooperative Snow Surveys

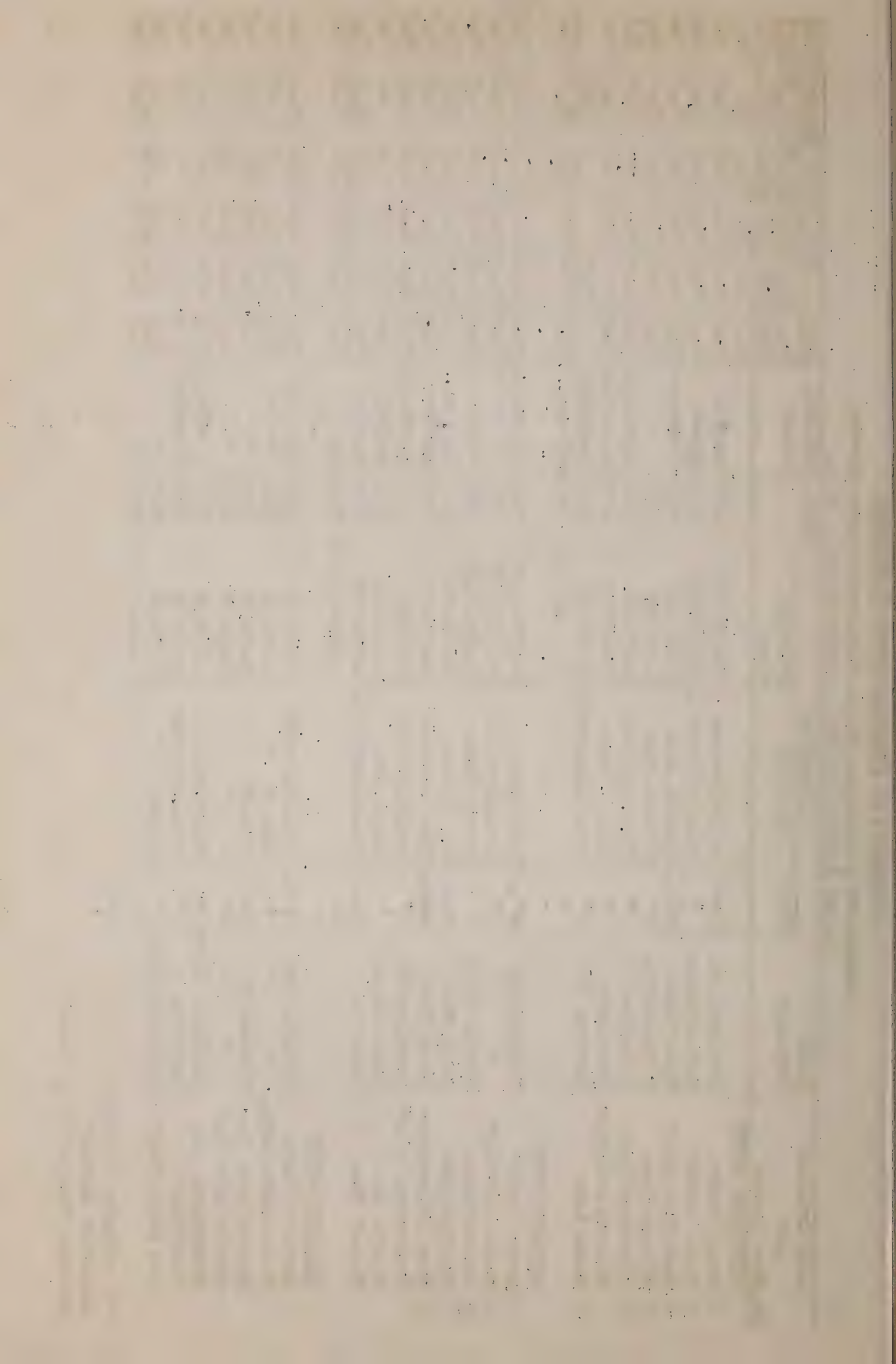
Issued April 10, 1943, at Fort Collins, Colo.

Main Drainage and No. Snow Course		Local Drainage	State	Location Locality	Description	Elev.	National Forest	April 1 Snow Cover Measurements					
								Av. Snow Depth	Av. Snow Depth	Av. Water Content			
No.								1942	1943	1942	1943	1945	
JEFFERSON RIVER													
6	Camp Creek*	Red Rock Cr.	Idaho	6mi. N. Spencer	21-13N-36E	6800	Targhee	In. 29.0	In. 30.6	In. 32.1	In. 8.4	In. 9.1	
7	Moose Creek*	N. Fk. Big Hole	"	3mi. S. Gibbons P.	27-27N-21E	6200	Salmon	In. 40.9	In. 40.8	In. 59.2	In. 13.9	In. 13.3	
7	East Fork R. S.*	Rock Creek	Mont.	13mi. NE. Sula	16-2N-17W	5400	Bitterroot	In. 11.3	In. 14.3	In. 27.6	In. 3.8	In. 4.7	
10	Gibbons Pass	N. Fk. Big Hole	"	Gibbons Pass	4-2S-19W	7100	"	In. 55.8	In. 56.9	In. 78.5	In. 20.5	In. 21.6	
30	Pipestone Pass	Pipestone Cr.	"	Pipestone Pass	11-1N-7W	7200	Deer Lodge	In. 18.7	In. 22.4	In. 24.2	In. 5.0	In. 5.4	
	Elkhorn Hot Spgs.	Wise River	"	8mi. N. Polaris	15-4S-12W	8450	Beaverhead	In. 30.0	In. 29.6	In. 43.4	In. 8.2	In. 7.2	
31	Storm Lake	Seymour Cr.	"	15mi. W. Anaconda	19-4N-13W	8100	Deer Lodge	In. 31.0	In. 32.4	In. 44.2	In. 10.0	In. 16.1	
Average for Drainage								31.0	32.4	44.2	10.0	15.4	
MADISON RIVER													
2	Astor Creek*	Firehole R.	Wyo.	Lewis Lake	44-3N110.6W	7700	Yel. Nat. P.	In. 77.2	In. 63.6	In. 30.0	In. 28.5	In. 21.1	
8	Lewis L. Divide*	"	"	3mi. S. Lewis L.	44-2N110.7W	7900	"	In. 104.0	In. 80.2	In. 55.0	In. 40.4	In. 28.6	
11	Norris Basin	Gibbon River	"	Norris Basin	44-3N110.7W	7500	"	In. 28.6	In. 26.9	In. 44.3	In. 8.8	In. 6.3	
3	Big Springs*	South Fork	Idaho	Big Springs	34-14N-44E	6500	Targhee	In. 55.3	In. 48.4	In. 75.6	In. 19.2	In. 16.1	
16	West Yellowstone	South Fork	Mont.	W. Yellowstone	34-13S-5E	6700	Gallatin	In. 33.5	In. 30.3	In. 49.6	In. 11.3	In. 8.6	
	Twenty-one Mile*	Greyling Cr.	"	8mi. S. Gallatin	1-11S-5E	7150	Yel. Nat. P.	In. 47.1	In. 40.6	In. 68.5	In. 16.0	In. 12.8	
	Hebgen Dam	Cabin Creek	"	Hebgen Dam	22-11S-3E	6550	Gallatin	In. 36.4	In. 31.7	In. 43.4	In. 12.2	In. 8.6	
	Valley View	Denny Cr.	Idaho	5mi. E. Henry's L.	7-15N-44E	6500	Targhee	In. 44.0	In. 38.3	In. 57.5	In. 13.9	In. 10.9	
Average for Drainage								53.3	45.0	78.0	18.8	14.1	
GALLATIN RIVER													
	Devil's Slide	Hyalite Cr.	Mont.	20mi. S. Bozeman	14-5S-6E	8100	Gallatin	In. 57.2	In. 61.6	In. 60.4	In. 18.2	In. 20.2	
	Hood Meadow Extn.	"	"	14mi. "	22-4S-6E	6500	"	In. 24.3	In. 31.0	In. 27.9	In. 6.8	In. 8.8	
	Mystic Lake No. 1	Bozeman Cr.	"	12mi. SE.	31-3S-7E	6600	"	In. 20.9	In. 28.0	In. 14.5	In. 6.1	In. 8.1	
	Mystic Lake No. 2	"	"	"	31-3S-7E	6600	"	In. 21.5	In. 28.0	In. 15.3	In. 5.9	In. 7.5	
	Twenty-one Mile	Gallatin River	"	8mi. S. Gallatin	1-11S-5E	7150	Yel. Nat. P.	In. 47.1	In. 40.6	In. 68.5	In. 16.0	In. 12.8	
	Ross Peak	Ross Cr.	"	12mi. N. Bozeman	10-1N-6E	7000	Gallatin	In. 22.1	In. 33.0	In. 17.5	In. 6.1	In. 9.3	
	New World Trail	Gallatin River	"	8mi. SE.	13-3S-6E	7000	"	In. 27.7	In. 33.0	In. 22.4	In. 8.9	In. 9.5	
Average for Drainage								31.5	36.5	32.4	9.7	10.9	

\*On adjacent drainage

Readings March 15

@Average for period of record

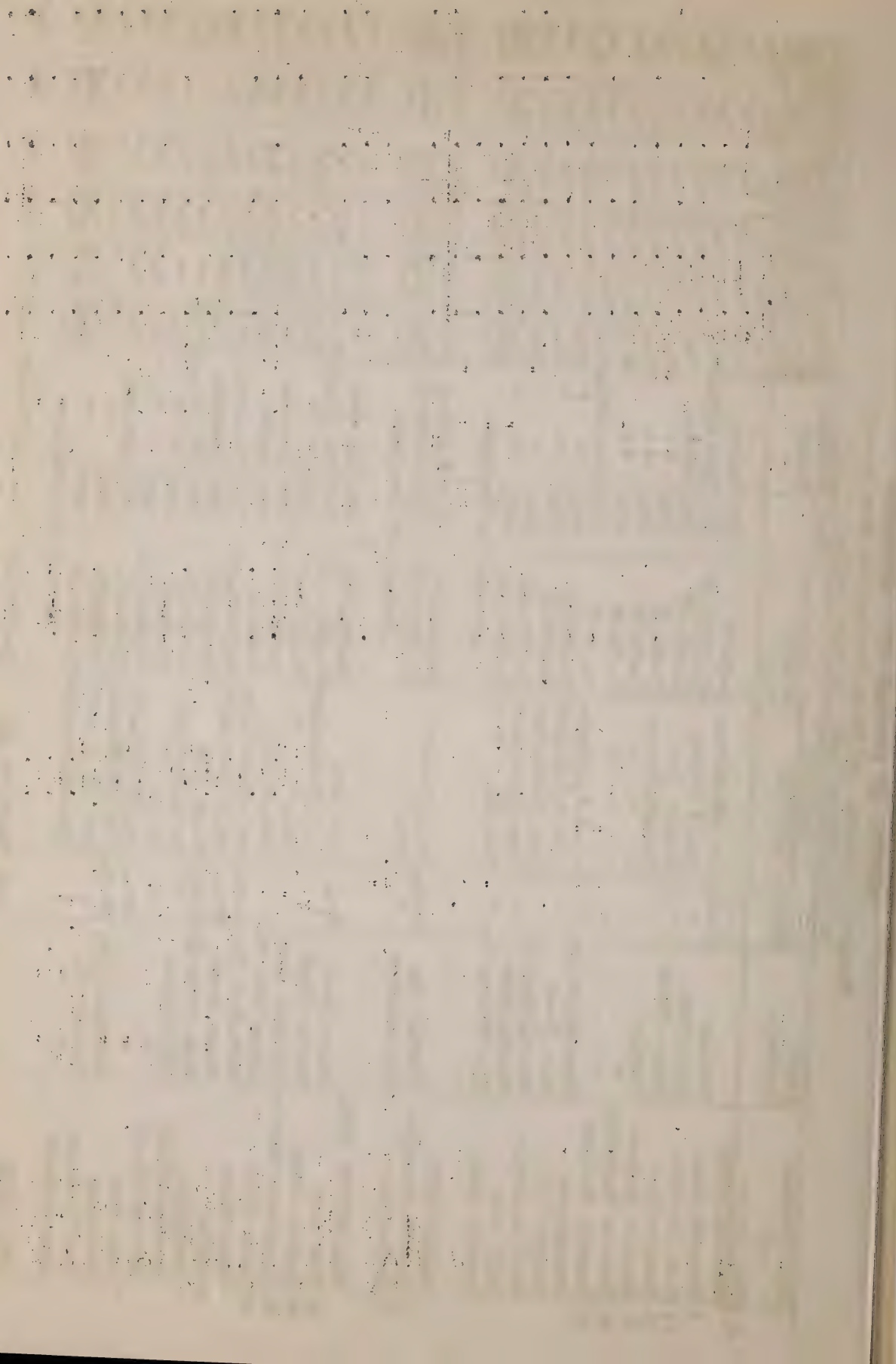




# MISSOURI AND ARKANSAS RIVER WATERSHEDS Summary of Federal and State Cooperative Snow Surveys Issued April 10, 1943, at Fort Collins, Colo.

No.	Main Drainage and Snow Course	Local Drainage	State	Locality	Description	Elev.	National Forest	Apr. 1 Snow Cover Measurements			
								Av. Snow Depth	Av. Water Content	1942	1943
								In.	In.	In.	In.
<b>MISSOURI RIVER</b>											
6	Chessman Res.	Tennile	Mont.	11mi. SW. Helena	2-8N-5W	6200	Helena	15.4	17.1	20.4	4.3
11	Goat Mountain	South Fork	"	26mi. W. Gilman	47.5N112.9W	7000	Lewis & Clark	26.7	23.9	52.3	7.5
36	Stemple Pass	Canyon Creek	"	Stemple Pass	16-13N-7W	6900	Helena	28.6	27.0	45.6	8.0
41	Tennile Cr. Lower	Tennile	"	17mi. SW. Helena	13-8N-6W	6250	"	21.6	27.5	30.2	5.6
42	Tennile Cr. Middle	"	"	"	13-8N-6W	6800	"	34.2	37.8	42.6	9.5
43	Tennile Cr. Upper	"	"	"	19-8N-5W	8000	"	40.0	41.4	51.4	12.2
	Grasshopper	Grasshopper Cr.	"	6mi. S.W. S. Spgs.	19-0N-8E	7000	Lewis & Clark	20.4	26.4	24.4	5.0
	King's Hill	Belt Creek	"	21mi. N.W. S. Spgs	35-13N-7E	7950	"	38.8	40.8	44.6	11.4
	Orville Harris	Mussellshell R.	"	12mi. E.W. S. Spgs	31-10N-9E	6500	"	20.1	23.7	21.5	5.0
	Half Moon	Judith River	"	19mi. S. Lewiston	22-12N-18E	6000	"	24.7	32.9	24.3	8.5
	Crystal Lake	Flat Willow Cr.	"	18mi. SE.	24-12N-17E	5500	"	36.8	47.1	34.5	11.6
					Average for Drainage			27.9	31.4	35.6	8.1
<b>MARIAS RIVER</b>											
7	Desert Mountain*	Cutbank Cr.	Mont.	4mi. S. Belton	24-31N-19W	5600	Flathead	35.4	31.6	53.8	11.7
20	Marias Pass	Two Medicine	"	Summit	48.3N113.4W	5250	Glacier NP	40.1	30.4	66.3	14.8
					Average for Drainage			37.8	31.0	60.0	13.2
<b>YELLOWSTONE RIVER</b>											
14	Dome Lake	Goose Creek	Wyo.	Dome Lake	11-53N-87W	8800	Big Horn	--	28.6	--	--
40	Lupine Creek	Lupine Creek	"	11mi. SE. Gardiner	44.9N110.6W	7300	Yel. Nat. P.	31.2	27.3	48.3	8.9
41	Blacktail Deer Cr	Blk. Tail Deer	"	11mi. "	44.9N110.6W	7500	"	35.8	30.4	52.3	10.6
43	Lodge Pole	Lodge Pole Cr.	"	34mi. NW. Cody	32-56N-106W	8200	Shoshone	34.7	25.2	57.8	10.8
	Camp Senia	W. Br. Rock Cr.	Mont.	10mi. W. Red Ldg.	2-8S-18E	7870	Custer	25.0	25.0	40.7	6.0
3	Canyon	Tower Creek	Wyo.	8mi. N. Canyon Jct	44.7N110.5W	7750	Yel. Nat. P.	36.7	30.6	57.8	9.7
	Cooke City	Soda Butte Cr.	Mont.	Cooke City	25-9S-14E	7400	Absaroka	26.5	20.6	43.2	7.4
	Crevice Mtn. #1	Yellowstone	"	6mi. E. Gardiner	26-9S-9E	8400	Yel. Nat. P.	34.9	--	46.8	10.1
	Crevice Mtn. #2	"	"	7mi. E. "	25-9S-9E	8200	"	34.7	--	45.9	9.9
7	Lake Camp	"	Wyo.	3mi. NE. Fish. Br.	44.6N110.4W	7850	"	34.3	28.9	60.5	9.7
	Porcupine	Porcupine Cr.	Mont.	12mi. NE. Wilsall	10-4N-10E	6500	Absaroka	17.2	22.2	16.9	3.8
	Hell's Canyon	Boulder Cr.	"	26mi. SE. Livgston	23-5S-12E	6000	"	8.0	13.5	10.5	2.9
	Independence	"	"	26mi. NE. Gardiner	22-7S-12E	8000	"	52.4	47.8	71.5	17.2
					Average for Drainage			30.2	27.2	46.0	8.7
<b>MILK RIVER</b>											
	Rocky Boy	Milk River	Mont.	Bear Paw Mt.	15-28N-16E	--	Off Forest	17.3	20.3	14.3	6.1

\*Adjacent Drainage @Average for period of record



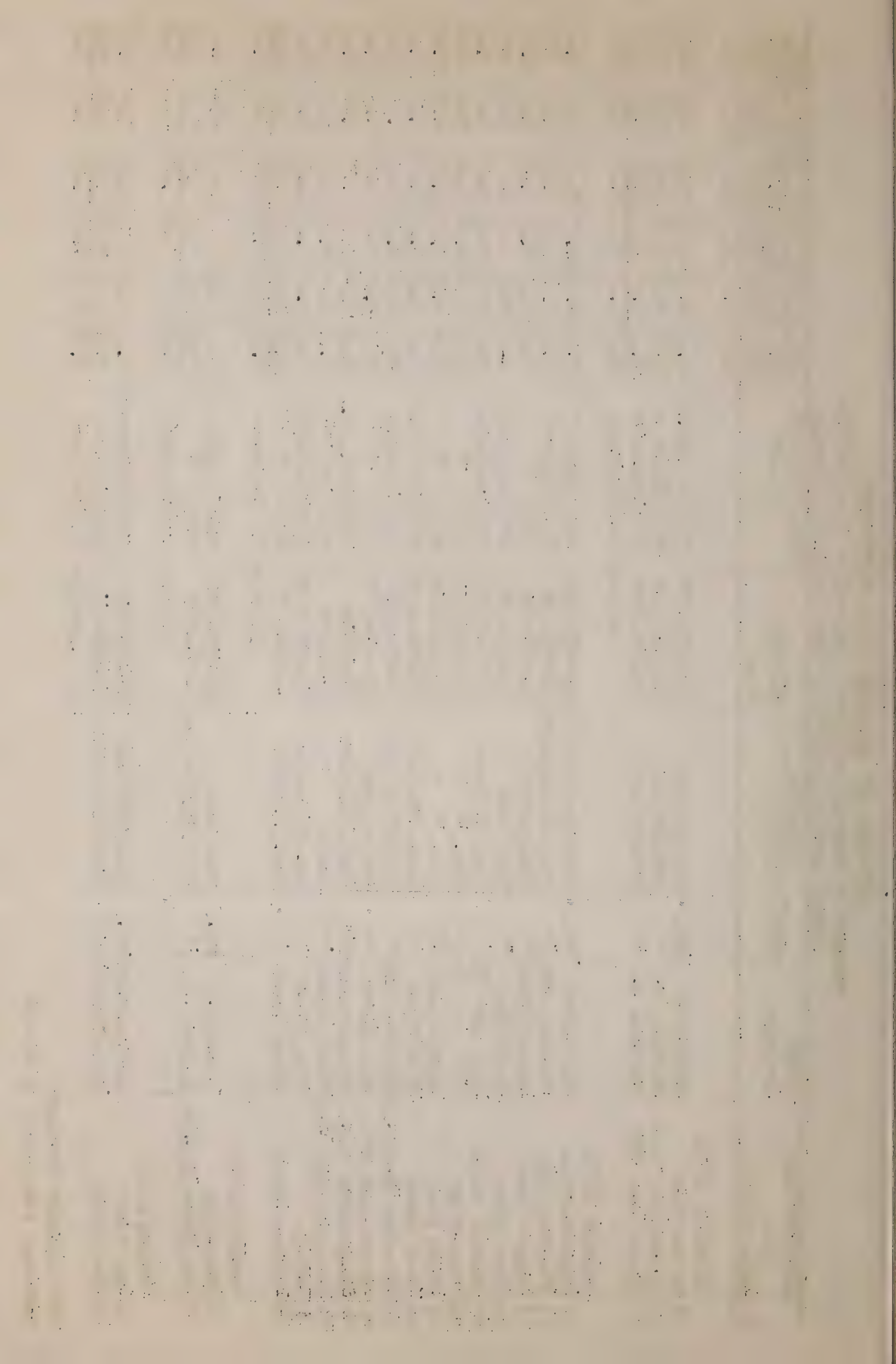


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			State Locality	Description			Av. Snow Depth	Av. Water Content		
							1942	1943	1942	1943
							In.	In.	In.	In.
<b>SHOSHONE RIVER</b>										
32	Sylvan Pass	Middle Cr.	Wyo.	Sylvan Pass	7100	Yel. Nat. P.	43.0	28.4	69.3	13.1
33	Up. Harpan Basin	Harpan Cr.	"	27 mi. SW. Cody	9500	Shoshone	41.6	41.6	61.6	10.6
50	Brooks Lake #3*	Shoshone R.	"	Brooks Lake	9200	Washakie	61.7	55.0	91.5	19.1
				Average for		Drainage	48.8	41.7	74.1	14.3
<b>BIGHORN RIVER</b>										
12	Togwotee Pass	Wind River	Wyo.	Togwotee Pass	9600	Teton	75.0	64.0	100.0	26.6
13	Tensleep R.S.	Tensleep Cr.	"	15 mi. NE. Tensleep	8300	Bighorn	29.2	29.6	32.9	6.6
16	Ranger Creek	Ranger Creek	"	14 mi. E. Shell	8800	"	33.3	32.1	40.3	7.4
14	Dome Lake*	Shell Cr.	"	Dome Lake	8800	Bighorn	--	28.6	--	--
45	Sawmill Glade	Popo Agie R.	"	13 mi. SW. Lander	8500	Washakie	23.3	22.5	30.5	5.8
46	Blue Ridge	"	"	15 mi. " "	9500	"	32.2	30.1	48.7	9.1
47	South Pass	L. Popo Agie R.	"	19 mi. " "	9000	"	39.4	34.7	57.2	11.2
48	Wood River	Wood River	"	42 mi. SW. Cody	8000	Shoshone	19.6	15.8	34.2	5.2
49	Sheridan Cr. R.S. #2	Sheridan Cr.	"	16 mi. NW. Dubois	7500	Washakie	24.1	21.2	46.8	6.2
50	Brooks Lake #3	Wind River	"	Brooks Lake	9200	"	61.7	55.0	91.5	19.1
51	St. Lawrence R.S.	St. Lawrence Cr.	"	27 mi. NW. Lander	9000	Shos. I. R.	31.9	21.4	43.2	8.7
52	Mosquito Park R.S.	Trout Creek	"	18 mi. " "	9500	"	37.6	26.9	48.3	11.0
53	DuNoir	Wind River	"	9 mi. NW. Dubois	8750	Washakie	38.0	20.0	56.7	11.5
54	T-Cross Ranch	Horse Creek	"	12 mi. N. Dubois	8000	"	20.6	14.0	59.0	6.9
				Average for		Drainage	35.9	30.5	53.0	10.4
<b>TONGUE RIVER</b>										
14	Dome Lake	Goose Cr.	Wyo.	Dome Lake	8800	Bighorn	--	28.6	--	--
17	Big Goose Cr. E.S.	E. Goose Cr.	"	20 mi. SW. Sheridan	7700	"	13.9	18.4	8.7	3.2
				Average for		Drainage	13.9	18.4	8.7	3.2
<b>POWDER RIVER</b>										
30	Red Fork	Middle Fork	Wyo.	23 mi. W. Kaycee	7500	Off Forest	25.9	28.0	32.3	6.2
31	Sour Dough	Sour Dough Cr.	"	10 mi. W. Klondike	8500	Bighorn	25.5	31.2	35.6	5.4
				Average for		Drainage	25.7	29.6	34.0	5.8

\*On adjacent drainage

Average for period of record





## MISSOURI AND ARKANSAS RIVER WATERSHEDS

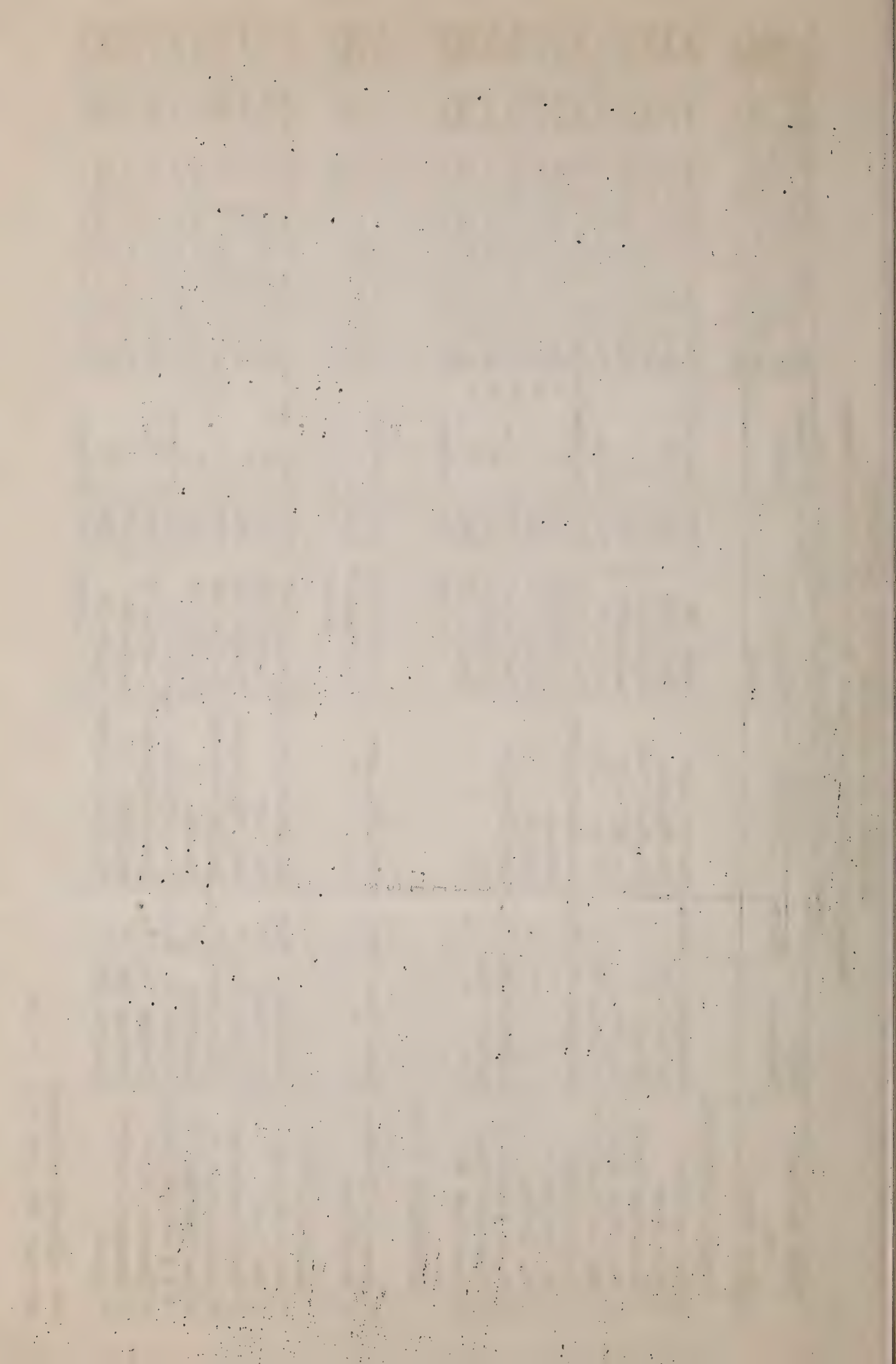
# Summary of Federal and State Cooperative Snow Surveys

Issued April 10, 1943, at Fort Collins, Colo.

Main Drainage and Snow Course		Local Drainage	State	Location		Elev.	National Forest	Apr. 1 Snow Cover Measurements					
No.	Snow Course	Drainage		Locality	Description			In.	in.	Snow Depth	Av. Water Content	1942	1943
NORTH PLATTE RIVER													
1	Cameron Pass	Michigan Cr.	Colo.	Cameron Pass	2-6N-76W	10300	Roosevelt	61.2	55.1	53.4	21.0	18.6	20.3
7	Park View	Illinois Cr.	"	7mi. SE. Rand	24-5N-78W	9200	Routt	34.2	34.3	29.7	10.6	9.7	6.9
8	Columbine Lodge	Grizzly Cr.	"	Rbt. Ears Pass	21-5N-82W	9300	"	64.4	64.5	72.0	22.2	20.5	26.9
51	Big Creek Lake	Big Creek	"	5mi. SW. Pearl	9-11N-82W	9000	"	35.2	33.5	39.5	10.6	14.1	11.3
62	Willow Creek P.*	Illinois Cr.	"	Willow Cr. Pass	1-4N-73W	9500	Arapaho	43.3	43.7	41.0	12.8	11.8	11.0
7	Bottle Creek	Encampmnt Cr.	Wyo.	7mi. SW. Encampmnt	24-14N-85W	8200	MedicineBow	43.7	40.1	44.8	14.4	10.6	14.9
8	Webber Spring	"	"	10mi. S.	27-14N-85W	9000	"	56.1	50.9	57.2	19.0	14.1	20.5
9	Old Battle	"	"	12mi. W.	29-14N-85W	9800	"	85.3	82.8	89.5	30.7	27.6	34.9
37	North French Cr.	N. French Cr.	"	Cent/Saratoga	27-16N-80W	10200	"	79.7	74.0	87.1	31.0	25.7	39.4
38	N. Barrett Cr. #2	Barrett Cr.	"	"	30-16N-80W	9400	"	60.5	53.7	60.1	20.6	15.1	21.9
39	Ryan Park #2	"	"	"	34-16N-81W	8400	"	37.8	40.0	32.8	11.3	11.5	10.0
					Average for Drainage			54.7	52.1	55.2	18.6	16.3	19.9
SWEETWATER RIVER													
29	Grammier Meadows	Rock Creek	Wyo.	20mi. SW. Lander	19-30N-100W	9000	Washakie	39.9	36.4	57.0	10.7	8.8	19.9
47	South Pass	"	"	19mi. "	13-30N-101W	9000	"	39.4	34.7	57.2	11.2	8.7	19.9
					Average for Drainage			39.6	35.6	57.1	11.0	8.8	19.9
LARAMIE RIVER													
3	Brooklyn Lake	Nash Fork	Wyo.	7mi. NW. Centennial	11-16N-79W	10200	MedicineBow	59.6	51.0	67.0	20.9	17.2	27.7
11	Fox Park	Fox Creek	"	Fox Park	21-13N-78W	9200	"	31.5	30.9	29.1	9.4	8.0	8.3
34	Pole Mountain#2*	Soldier Cr.	"	10mi. SE. Laramie	35-15N-72W	8700	"	12.8	19.4	3.9	3.9	5.2	1.1
35	Libby Lodge #2	Libby Creek	"	3mi. NW. Centennial	29-16N-78W	8700	"	27.4	25.8	34.3	8.2	6.9	13.2
36	Hairpin Turn #2	Nash Fork	"	5mi. NW.	24-16N-79W	9500	"	36.1	29.3	48.0	10.8	8.6	16.5
4	W. Port. S-P. Tunnel	Laramie R.	Colo.	4mi. N. Chambers L.	7-8N-75W	8600	Roosevelt	30.7	25.0	37.6	9.4	6.3	11.7
50	Deadman Hill*	Deadman Cr.	"	10mi. W. R. Feather	26-10N-75W	10200	"	45.6	42.3	57.9	13.4	10.5	18.7
71	Deadman Hill#2*	Deadman Cr.	"	8mi. SW.	6-9N-74W	10200	"	38.2	34.6	49.0	11.0	9.0	15.7
88	Roach	LaGarde Cr.	"	8mi. NW. Glendevey	5-10N-77W	9800	"	55.4	57.8	62.0	18.5	18.3	22.0
					Average for Drainage			37.5	35.1	43.2	11.7	10.0	15.0

\*On adjacent drainage

2Average for period of record





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Main Drainage and No. Snow Course	Local Drainage	Location		Elev.	National Forest	Apr. 1 Snow Cover Measurements			
		State	Locality			Descrip- tion	Av. Snow Depth	Av. Water Content	
							1942	1943	1942
							In.	In.	In.
<b>SOUTH PLATTE RIVER</b>									
14	Hoosier Pass	S. Platte R. Colo.	Hoosier Pass	11400	Pike	13-8S-78W	44.4	47.4	13.1
15	Fairplay	" " "	Fairplay	10000	"	33-9S-77W	3.7	0.0	1.6
83	Jefferson Cr. #2	Jefferson Cr. "	5mi. NW. Jefferson	10100	"	14-7S-76W	20.1	36.8	8.0
			Average for Drainage				22.4	28.1	7.6
								6.0	8.7
<b>CROW CREEK</b>									
34	Pole Mountain #2	Crow Creek Wyo.	10mi. SE. Jaramie	8700	Medicine Bow	35-15N-72W	12.8	3.9	5.2
									1.1
<b>POUDRE RIVER</b>									
1	Cameron Pass	Joe Wright Cr. Colo.	Cameron Pass	10300	Roosevelt	2-6N-76W	61.2	53.4	18.6
2	Chambers Lake	Poudre River "	Chambers Lake	9000	"	6-7N-75W	23.3	29.1	6.0
3	Big South	" " "	2mi. E. Chambers L	8600	"	33-8N-75W	8.4	8.9	1.1
50	Deadman Hill	No. Poudre R. "	10mi. W. R. Feather	10200	"	26-10N-75W	45.6	42.3	10.5
65	Lake Irene*	Big S. Poudre "	1mi. SW. Milner P.	10600	Ry. Mtn. N.P.	8-5N-75W	63.2	64.4	18.0
68	Hour Glass Lake	L. S. Poudre "	2mi. NW. Pingree P.	9500	Roosevelt	18-7N-73W	28.2	41.1	6.9
71	Deadman Hill #2	N. Poudre R. "	8mi. SW. R. Feather	10200	"	6-9N-74W	38.2	49.0	9.0
			Average				38.3	43.4	10.0
								12.0	15.0
<b>BIG THOMPSON</b>									
65	Lake Irene*	Big Thompson R. Colo.	1mi. SW. Milner P.	10600	Ry. Mtn. N.P.	8-5N-75W	63.2	64.4	18.0
95	Hidden Valley #2	Hidden Valley Cr. "	9mi. W. Estes P.	10200	"	23-5N-74W	40.3	50.2	9.6
			Average				51.8	57.3	13.8
								16.0	19.6
<b>ST. VRAIN RIVER</b>									
41	Wild Basin	N. St. Vrain R. Colo.	5mi. W. Allens P.	10000	Ry. Mtn. N.P.	24-3N-74W	45.4	56.4	12.4
									20.2
<b>BOULDER CREEK</b>									
5	E. Port. Moffat T.	S. Boulder Cr. Colo.	East Portal	9400	Roosevelt	2-2S-74W	9.7	0.0	1.5
60	University Camp #2	N. Boulder "	5mi. SW. Ward	10300	"	28-1N-73W	57.0	71.9	18.5
			Average for Drainage				33.4	36.0	10.0
								11.2	14.3

\*On adjacent drainage

@Average for period of record







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			Locality	Descrip- tion			Av. Snow Depth Av. @ 1942	Av. Water Content Av. @ 1943	1942	1943		
CLEAR CREEK												
61	Loveland Pass #2	Clear Creek	Colo.	10mi. W. Georgetown	10100	Arapaho	46.1	47.5	51.2	13.5	13.9	17.9
ARKANSAS RIVER												
19	Tennessee Pass	Tennessee Cr.	Colo.	Tennessee Pass	10200	Cochetopa	36.0	40.1	31.3	9.4	10.5	11.0
21	Twin Lakes Tun.	Lake Creek	"	9mi. W. Twin Lakes	10500	"	38.0	37.1	39.7	10.1	10.4	12.1
42	Marshall Creek*	Poncha Cr.	"	Marshall Pass	10800	"	46.9	46.2	47.8	13.9	11.9	15.0
43	Poncha Creek	"	"	"	10500	"	38.1	37.2	40.9	11.8	10.8	13.3
72	Whiskey Creek #2	Whiskey Cr.	"	Whiskey Cr. Pass	10300	Maxwell Gr.	25.2	19.3	11.3	7.4	6.5	3.8
74	LaVeta Pass #2*	Cuchara Cr.	"	LaVeta Pass	9300	San Cristogr	25.5	27.5	19.3	7.4	7.2	4.7
78	Four Mile Park #2	Lake Creek	"	3mi. SW. Twin L.	9700	Cochetopa	10.2	17.1	11.2	2.8	4.7	3.1
79	Fremont Pass #2	E. Fork Ark. R.	"	Fremont Pass	11400	Arapaho	53.4	57.5	61.8	16.7	15.6	20.1
81	Blue Lakes #2	Cuchara Cr.	"	15mi. SW. LaVeta	10000	San Isabel	21.2	22.0	10.1	5.6	5.9	2.7
92	Monarch Pass	S. Fork Ark. R.	"	Monarch Pass	10500	Cochetopa	60.4	61.0	59.4	19.7	19.0	20.8
Average for Drainage							35.5	36.5	33.3	10.5	10.2	10.7

\*On adjacent drainage

@Average for period of record



